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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HENDRIK WERMTER, RÜDIGER WISSEMBORSKI, and THOMAS JANSSEN¹

Appeal 2015-000698² Application 13/254,118 Technology Center 1700

Before ROMULO H. DELMENDO, JEFFREY W. ABRAHAM, and JENNIFER R. GUPTA, *Administrative Patent Judges*.

ABRAHAM, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the decision of the Examiner rejecting, for at least the second time, claims 1, 2, and 4–18. We have jurisdiction pursuant to 35 U.S.C. § 6(b). We affirm.

¹ According to the Appeal Brief, the Real Party in Interest is CHEMISCHE FABRIK BUDENHEIM KG. App. Br. 1.

² We heard oral arguments from the Appellants' representative on November 10, 2016. A written transcript will be entered into the record when it is made available.

BACKGROUND

Appellants' claimed invention relates to radiation-absorbing, plastics based materials. Spec. 1.

Claim 1 is the only independent claim on appeal, and is reproduced below from the Claims Appendix:

1. A radiation-absorbing, plastics-based material consisting of a polymer matrix with an absorber material or mixture of absorber materials contained therein,

wherein the absorber material or mixture of absorber materials is selected from phosphates, condensed phosphates, phosphonates, phosphites and mixed hydroxide-phosphate-oxoanions of copper (Cu), tin (Sn), calcium (Ca) and/or iron (Fe) and is present finely distributed, dispersed or dissolved in the polymer matrix in a quantity of from 0.0005 to 3 wt%,

wherein the radiation-absorbing, plastics-based material has:

- a) a transmittance I_T/I_0 of ≤ 0.60 for ultraviolet radiation (UV) over the wavelength range of from 200 to 380 nm, and
- b) a transmittance I_T/I_0 of ≤ 0.30 for infrared radiation (IR/NIR) over the wavelength range of from 900 to 1500 nm,

wherein I_0 = intensity of the incident radiation and I_T = intensity of the penetrating radiation,

wherein the material is present as a film, layer or thin sheet with a thickness in the range of from 1 µm to 3 mm, and

wherein the absorber material has an average particle size (d50) of less than 20 μm .

The Examiner maintains, and Appellants appeal, the rejection of claims 1, 2, 4–8, and 10–18³ under 35 U.S.C. § 103(a) over

³ Although the Examiner did not list claim 5 in the heading for this rejection (Non-Final Act. 2, Ans. 2), the Examiner did address substantively claim 5 as part of the rejection (Non-Final Act 5). Appellants also include claim 5 as

Appeal 2015-000698 Application 13/254,118 Raupach⁴ and Faber;⁵ and the rejection of claim 9 under 35 U.S.C. § 103(a) over Raupach, Faber, and Caggiano.⁶

Appellants do not separately argue the patentability of any dependent claim, and therefore, claims 2 and 4–18 stand or fall with independent claim 1.

OPINION

We sustain the above rejections based on the Examiner's findings of fact, conclusions of law, and rebuttals to Appellants' arguments, as expressed in the Non-Final Office Action and Examiner's Answer. The following comments are added for emphasis.

The Examiner finds that Raupach discloses a plastic material used in plastic packaging, and teaches all of the limitations of claim 1 except for the requirement that "the absorber material has an average particle size (d50) of less than 20 μm." Non-Final Act. 3–6. The Examiner finds that Faber teaches a thermoplastic composition for producing molded articles comprising a polymer matrix and a copper salt, wherein the copper salt has a particle size of less than about 10 μm. *Id.* at 5. According to the Examiner, it would have been obvious to a person of ordinary skill in the art to use a copper salt having an average particle size of less than 10 μm "because it has

part of the "Grounds of Rejection to be Reviewed on Appeal" (App. Br. 2) and in its arguments regarding dependent claims (*id.* at 2, 9).

⁴ Raupach et al., US 2005/0249938 A1 (published Nov. 10, 2005).

⁵ Faber et al., EP 0 697 433 A1 (published Feb. 21, 1996).

⁶ Caggiano, US 4,861,632 (issued Aug. 29, 1989).

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been shown that radiation absorbing particles of this size result in visibly distinct markings, based on the teachings of Faber." *Id*.

With regard to the transmittance properties recited in claim 1, the Examiner finds that because Raupach and Faber teach a polymer matrix having copper hydroxide phosphate present in the same amount as recited in the claims, the composition "inherently possesses the same transmittance properties when exposed to UV, IR and visible light as claimed" by Appellants. *Id.* at 4–5; Ans. 10–12 (noting that "*Raupach* and *Faber* teach an intermediate product that is identical to Appellants' composition" and that the intermediate product "*must be* transparent and block/absorb UV and/or IR radiation" because it is "*the same* as Appellants' composition"). The Examiner states that "[t]he *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)." *Id.*

Appellants argue that the Examiner improperly relies on inherency in rejecting claim 1 because the rejection "is based on allegedly inherent features of a theoretical material based on the Examiner's proposed combination of references," and that a person of ordinary skill in the art "when combining the broad disclosures of *Raupach* and *Faber* would not have been expected to always arrive at products that are identical or substantially identical to the claimed invention." App. Br. 4–5. We, however, agree with the Examiner's finding that Raupach and Faber are specific in their disclosures of radiation absorbing compositions, including disclosing the type, concentration, distribution, and particle size of the particles that make up the composition, and that Raupach and Faber, together, disclose a radiation absorbing composition having the same type of

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absorber material (copper phosphate), distribution, concentration, and particle size as the composition recited in claim 1. Ans. 3–4. In view of the Examiner's finding that Raupach and Faber disclose a product that is identical or substantially identical to that claimed, the Examiner reasonably concluded that the claimed UV and IR transmittance properties would inherently be present in the prior art product. *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977); *In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990).

We are not persuaded by Appellants' contention that "not every material consisting of a polymer matrix and an absorber material of the type and amount recited in claim 1 possesses the claimed transmittance properties for ultraviolet and infrared radiation," but instead a person of ordinary skill in the art would have to adjust the transmittance values to fall within the claimed ranges. App. Br. 5. Appellants fail to provide any evidence to support this argument in the Appeal Brief. *See* App. Br. 5–6; Ans. 4–6 (noting Appellants' failure to provide evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products).

In the Reply Brief, Appellants for the first time argue that Hirthe (US 2007/0155881 A1 (published July 5, 2007)) shows that absorber materials having the claimed structure do not inherently possess transmittance values within the claimed ranges. Reply Br. 3–4. Rule 41, however, which provides for reply briefs, states that "[a] reply brief shall not include . . . any new or non-admitted affidavit or other Evidence," and that "[a]ny argument raised in the reply brief which was not raised in the appeal brief . . . will not be considered by the Board for purposes of the present appeal, unless good cause is shown." 37 C.F.R. § 41.41(b)(1) and (2). Appellants did not present these arguments regarding Hirthe in the Appeal

Brief, and have not shown good cause as to why we should consider the new arguments and evidence presented in the Reply Brief, especially considering that due to the failure to present these arguments earlier, the Examiner did not have an opportunity to address them. *Ex parte Borden*, 93 USPQ2d 1473, 1476 (BPAI 2010) (informative opinion) ("When new issues have been raised by the Appellant but not addressed by the Examiner, the Board, unless good cause is shown, will not consider those new issues"). As a result, we decline to consider the arguments raised in the Reply Brief regarding Hirthe.⁷

Nor are we persuaded by Appellants' argument that the Examiner has failed to provide a reason, based on the prior art alone, that a person of ordinary skill in the art would have combined the teachings of Raupach and Faber to arrive at a product that is structurally similar to the claimed product. App. Br. 6–7. As discussed above, the Examiner finds that the teachings of Faber provide such a reason. Non-Final Act. 5; *see also* Ans. 8 ("According to *Faber*, the size of the particle has a direct effect on the laser marking").

Appellants' arguments that Raupach and Faber are "concerned with laser-marking, but not with UV and IR radiation protection while maintaining transparency to visible light," are equally unavailing. *See* App. Br. 7–9. First, the Examiner's rejection is based on the "intermediate product" (i.e., prior to applying any laser treatment) formed in view of the combined teachings of Raupach and Faber that is identical to Appellants' claimed composition. Ans. 10–12. Second, "[i]n determining whether the

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⁷ Even if we were to consider Appellants' arguments regarding Hirthe, we note that Appellants rely primarily on arguments and conclusions provided by counsel. Attorney argument, however, cannot take the place of evidence. *E.g.*, *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974).

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subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). Moreover, "any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 420.

Appellants also argue that

it would not have been obvious to pick and choose features from *Raupach* and *Faber* to form a plastics material having the claimed transmittance, at least because neither reference recognized ultraviolet or infrared transmittance as a property to optimize, nor do the references recognize what values of that property would be desired.

App. Br. 7. We, however, agree with the Examiner's finding that the ultraviolet and infrared transmittance properties inherently result from the structural features of the composition, and, therefore, the discovery of a new property of a previously known composition cannot impart patentability to claims of the known composition. Ans. 9 (citing *In re Spada* 911 F.2d 705 (Fed. Cir. 1990)); *see also id.* at 7 ("The fact that Appellants have recognized another advantage (UV and/or IR transmittance values) which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. *See Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985)").

We have considered Appellants' remaining arguments (*see*, *e.g.*, App. Br. 8–10; Reply Br. 5–6) and find none that warrant reversal of the appealed rejections based on the reasoning discussed above and provided by the

Appeal 2015-000698 Application 13/254,118 Examiner. *Cf. In re Antor Media Corp.*, 689 F.3d 1282, 1294 (Fed. Cir. 2012).

CONCLUSION

For the reasons set forth above, we affirm the decision of the Examiner to reject claims 1, 2, and 4–18.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED